



PAR 1113 & 314
Public Consultation
Meeting

SEPTEMBER 17, 2015

BACKGROUND

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- Rule 1113 – Architectural Coatings Adopted on September 2, 1977
 - 2012 AQMP inventory (projected 2014 annual VOC emissions) ≈ 15 tpd
 - Last amended September 6, 2013
 - Regulatory relief for small container labeling
- Rule 314 – Fees for Architectural Coatings Adopted on June 6, 2008
 - Initial tiered emissions fee approach
 - Amended annually for CPI adjustments
 - Draft Rule 314 reported data indicates 11 tpd



BACKGROUND

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▶ 2012 AIR QUALITY MANAGEMENT PLAN

Control Measure CM#2012 CTS-01 – Further VOC Reductions from Architectural Coatings

- ▶ 25 g/L for flat, non-flat, & PSU
- ▶ Transfer Efficiency Requirements
- ▶ Restrictions on the Small Container Exemption
- ▶ Committed to 2 – 4 tpd VOC reduction

▶ 2016 AQMP VOC White Paper



PAR 1113 OVERVIEW

- ▶ Limit the small container exemption
- ▶ Propose new categories and phase out two categories
- ▶ Reduce the VOC limit of some architectural coating categories to reflect currently available inventory and sales
- ▶ Include colorants in the labeling requirements
- ▶ Include several new test methods
- ▶ Rule clarification
- ▶ Remove outdated language



PROPOSED AMENDED
PAR 314

FEE RATE

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Annual Quantity Fee: of \$0.04~~1~~ per gallon of coating
until the effective date listed below:

VOC of Material (g/L)	Fee ¹	Effective Date
0.00 – 10.00	\$0.01 1	01/01/17
10.01 – VOC limit	\$0.04 1	01/01/17
25.01 – 50.00	\$0.05¹	01/01/19
50.01 – 100.00	\$0.06¹	01/01/19
>100.01	\$0.07¹	01/01/19

~~Notwithstanding the above fees, any coating sold over the applicable VOC limit, including non-compliant coatings² and coatings sold under the small container exemption, are subject to the following sales fee:~~

> Applicable VOC Limit	\$0.4 1 0	01/01/19
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FEE RATE IMPACTS –

Based on 2014 Rule 314 Data

Current Fee Rate	Sales Fee	Em Fee	Volume (gal)*	Emissions (tons)*	Sales	Emission	Total
≤5	\$0	\$0	9,304,258	40.5	\$0	\$0	\$0
Everything else	\$0.041	\$268.42	26,993,473	3,789.4	\$1,106,732.41	\$1,017,159.90	\$2,123,892.31
* less recycled		Total	36,297,731	3,829.9	\$1,106,732.41	\$1,017,159.90	\$2,123,892.31

Phase 1 (01/01/17)	Sales Fee	Em Fee	Volume (gal)*	Emissions (tons)*	Sales	Emission	Total
≤5	\$0	\$0	9,304,258	40.5	\$0	\$0	
5.01 – 10	\$0.01	\$268.42	3,424,069	91.2	\$34,240.69	\$24,493.15	\$58,733.84
Everything else	\$0.04	\$268.42	23,569,405	3,698.2	\$942,776.19	\$992,666.75	\$1,935,442.93
* less recycled		Total	36,297,731	3,829.9	\$977,016.87	\$1,017,159.90	\$1,994,176.77

FEE RATE IMPACTS (cont)

Phase II (01/01/19)	Sales Fee	Em Fee	Volume (gal)*	Emissions (tons)*	Sales	Emission	Total
≤5	\$0	\$0	9,304,258	40.5	\$0	\$0	\$0
5.01 – 10	\$0.01	\$ 268.42	3,424,069	91.2	\$34,240.69	\$24,493.15	\$58,733.84
10.01 – VOC Limit	\$0.04	\$ 268.42	22,766,016	2,689.1	\$910,640.65	\$721,815.03	\$1,632,455.68
>VOC Limit	\$0.40	\$ 268.42	803,388	1,009.1	\$321,355.35	\$270,851.72	\$592,207.07
* less recycled		Total	36,297,731	3,830	\$1,266,236.69	\$1,017,159.90	\$2,283,396.59

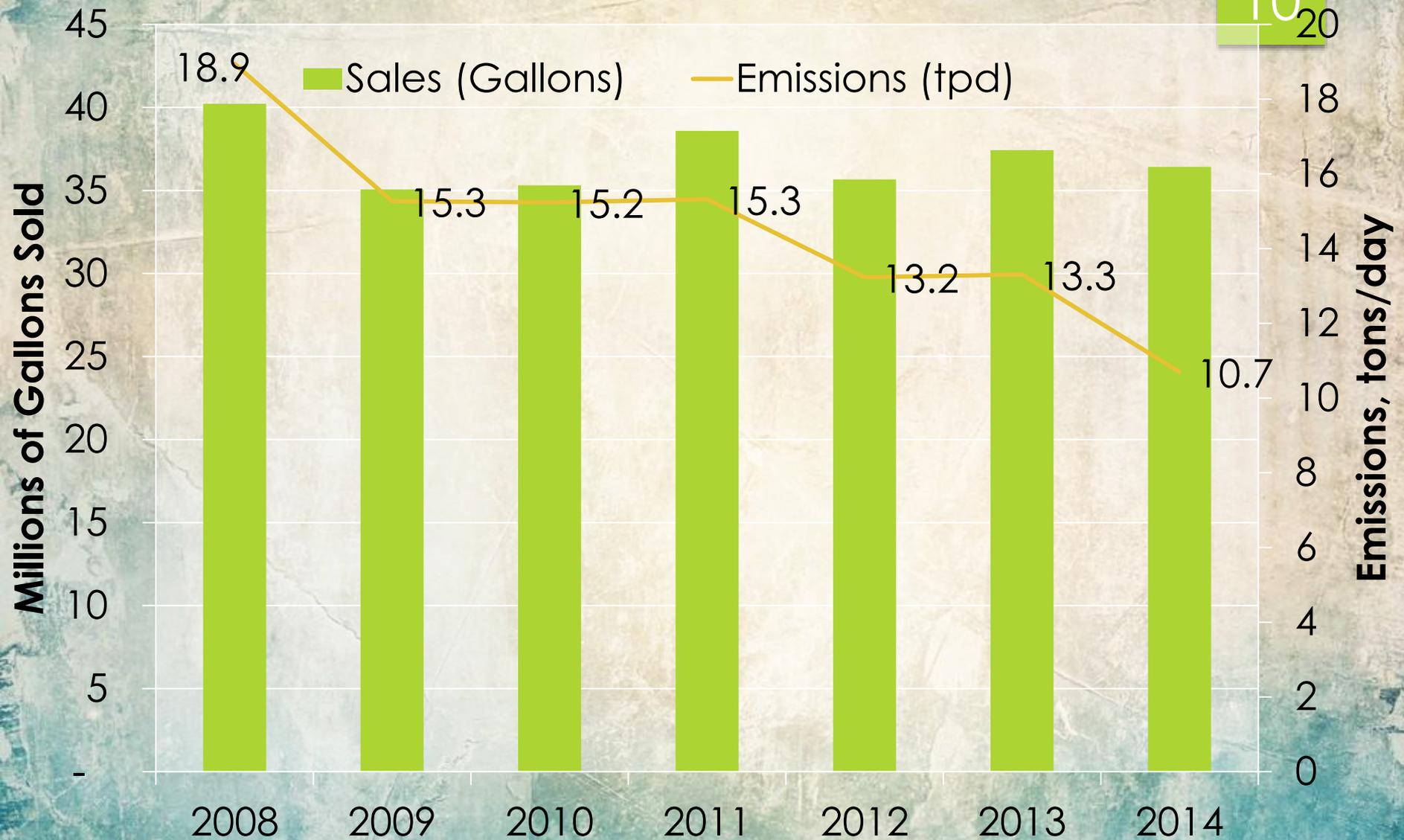
Future Projection	Sales Fee	Em Fee	Volume (gal)*	Emissions (tons)*	Sales	Emission	Total
≤5	\$0	\$0	9,304,258	40.5	\$0	\$0	
5.01 - 10	\$0.01	\$268.42	3,424,069	91.2	\$34,240.69	\$24,493.15	\$58,733.84
10.01 – VOC Limit	\$0.04	\$ 268.42	23,009,770	2,689.1	\$920,390.81	\$721,815.03	\$1,642,205.84
>VOC Limit	\$0.40	\$ 268.42	559,634	682.6	\$223,853.71	\$183,234.03	\$407,087.74
* less recycled		Total	36,297,731	3,504	\$1,178,485.21	\$929,542.21	\$2,108,027.42



SALES AND EMISSION TRENDS

SUMMARY OF 2008 – 2014 RULE 314 DATA
(DATA SUBJECT TO CHANGE)

OVERALL TOTAL SALES 2008 - 2014*



* 314 Draft Data + estimated colorant emissions



PAR 1113

**Proposed Changes Since
Public Workshop**

APPLICABILITY

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This rule is applicable to any person who supplies, sells, markets, offers for sale, or manufactures any architectural coating ~~in the District~~ that is intended to be field applied within the District to stationary structures or their appurtenances, and to fields and lawns...

DEFINITIONS

GLAZES

~~which~~ are coatings formulated and recommended to be used (or to be mixed with another coating) ~~designed~~ for:

- i. ~~w~~Wet-in-wet techniques, ...
- ii. Wet-in-dry techniques, ...

FLAT COATINGS

are coatings that register a gloss of less than 15 on an 85-degree meter or less than 5 on a 60-degree meter according to ASTM Test Method D 523 as specified in paragraph (e)(5).

WOOD COATINGS

are film forming coatings used for application to wood substrates only, which are applied to substrates including floors, decks and porches. The Wood Coating category includes all lacquer topcoats, varnish es topcoats and sanding sealers, regardless of whether they are clear, semi-transparent or opaque.

TOPCOAT

is any final coating, applied in one or more coats, to the interior or exterior of a stationary structure or their appurtenances.

LAQUERS

are clear or pigmented wood ~~coatings~~ topcoats ~~including and~~ clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by evaporation without chemical reaction.

VARNISHES

are clear or pigmented wood ~~coatings~~ topcoats formulated with various resins to dry by chemical.

WOOD CONDITIONERS

are coatings that are ~~used~~ formulated for or applied to prepare bare wood for staining to provide uniform penetration of stain.

MASTIC COATINGS

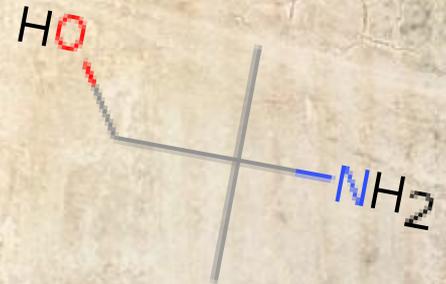
MASTIC COATINGS are coatings formulated to cover holes and minor cracks and to conceal surface irregularities, excluding roof coatings, and applied in a thickness of at least 10 mils (dry, single coat).

VOLATILE ORGANIC COMPOUND

is as defined in Rule 102 – Definition of Terms. For the purpose of this rule, tertiary butyl acetate (tBAC) shall be considered exempt as a VOC only for purposes of VOC emissions limitations or VOC content requirements ...when used in industrial maintenance coatings, including zinc-rich industrial maintenance coatings and non-sacrificial anti-graffiti coatings. For the purpose of this rule, 2-Amino-2-Methyl-1-Propanol (AMP) shall be considered exempt as a VOC.

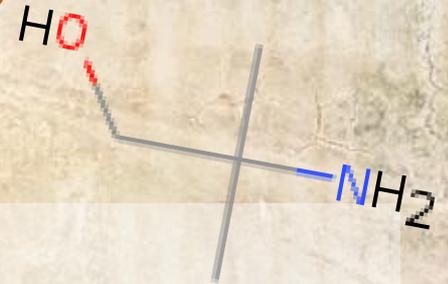
2-Amino-2-Methyl-1-Propanol (CAS 124-68-5)

- ▶ OEHHA interim analysis:



	Acute REL	Chronic REL
AMP	990 µg/m ³	1 µg/m ³
Ammonia	3200 µg/m ³	200 µg/m ³

AMP Exposure Calculations



Assumptions:

- AMP in paint: 0.5 wt%
- **10x10x8 foot room, 2 gallons paint, density 1.4 g/mL**
- ALL AMP will volatilize into the air within the exposure duration.

Air Exchange Rate (hourly)	0.3	1	2	5	AMP RELs
Acute Concentration ($\mu\text{g}/\text{m}^3$)	1,799,546	1,169,705	779,803	389,902	>> 990 $\mu\text{g}/\text{m}^3$
Chronic Concentration ($\mu\text{g}/\text{m}^3$)	428,463	278,501	185,667	92,834	>> 1 $\mu\text{g}/\text{m}^3$

RECYCLED COATINGS

- ▶ Proposing to delay the implementation date of the VOC limit reduction for Recycled Coatings to January 1, 2019
- ▶ Proposing to include an exemption for Recycled Coatings in the most restrictive clause:

The provisions of paragraph (c)(3)(A) shall not apply to recycled coatings.

BUILDING ENVELOPE COATINGS

Volume (gals)	SWA VOC (g/L)	Adjusted SWA VOC (g/L)	Emissions (tpd)	# products	# products over 100 g/L	# products over 50 g/L	Potential Emissions *	Potential Reductions**
20,295	86	22	0.012	12	2	3	0.01	0.005

* All coatings formulated to 100g/L VOC limit

** All coatings formulated to 50g/L

REQUIREMENTS

(c)(2) No person within the District shall, at the point of sale of any architectural coatings subject to paragraph (c)(1), add to such coating any colorant ~~at the point of sale that is listed in the Table of Standards 2 and~~ contains VOC in excess of the corresponding applicable VOC limit specified in the Table of Standards 2, ~~after the effective date specified.~~

REQUIREMENTS (cont.)

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Sell-Through

Any coating that is manufactured prior to the effective date of the applicable limit specified in the Table of Standards 1, and that has a VOC content above that limit (but not above the limit in effect on the date of manufacture), may be sold, supplied, offered for sale, or applied for up to three years after the specified effective date. ~~The manufacturer shall maintain sales and distribution records, as applicable, for any coating manufactured prior to the effective date if that coating volume is not included in an approved Averaging Compliance Option [specified in paragraph (c)(6) of this rule] Program that includes the same coating manufactured on or after the effective date. Such records shall clearly indicate the date of manufacture (or date code or batch code) and volume of coating sold or distributed to distinguish between those coatings subject to the provisions of this paragraph and those subject to the provisions of Appendix A section (K). These records shall be made available to the Executive Officer upon request and shall be maintained for a period of at least three years after the effective date of the VOC limit change end of a compliance period of the Averaging Compliance Option Program.~~

ADMINISTRATIVE REQUIREMENTS

- ▶ Include an effective date of January 1, 2017 for colorant labeling requirements
- ▶ Proposed rule language:
Containers for all coatings, and colorants manufactured on and after January 1, 2017, subject to this rule shall display the date of manufacture

EXEMPTIONS

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SMALL CONTAINER EXEMPTION

- ▶ Include an effective date of January 1, 2017 for:
 - Tub and Tile Coatings
 - 0.01 tpd reduction
 - Shellacs
 - 0.001 tpd reduction
 - Reactive Penetrating Sealers
 - 0.0001 tpd reduction

SCAQMD METHOD 313

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▶ Precision and bias

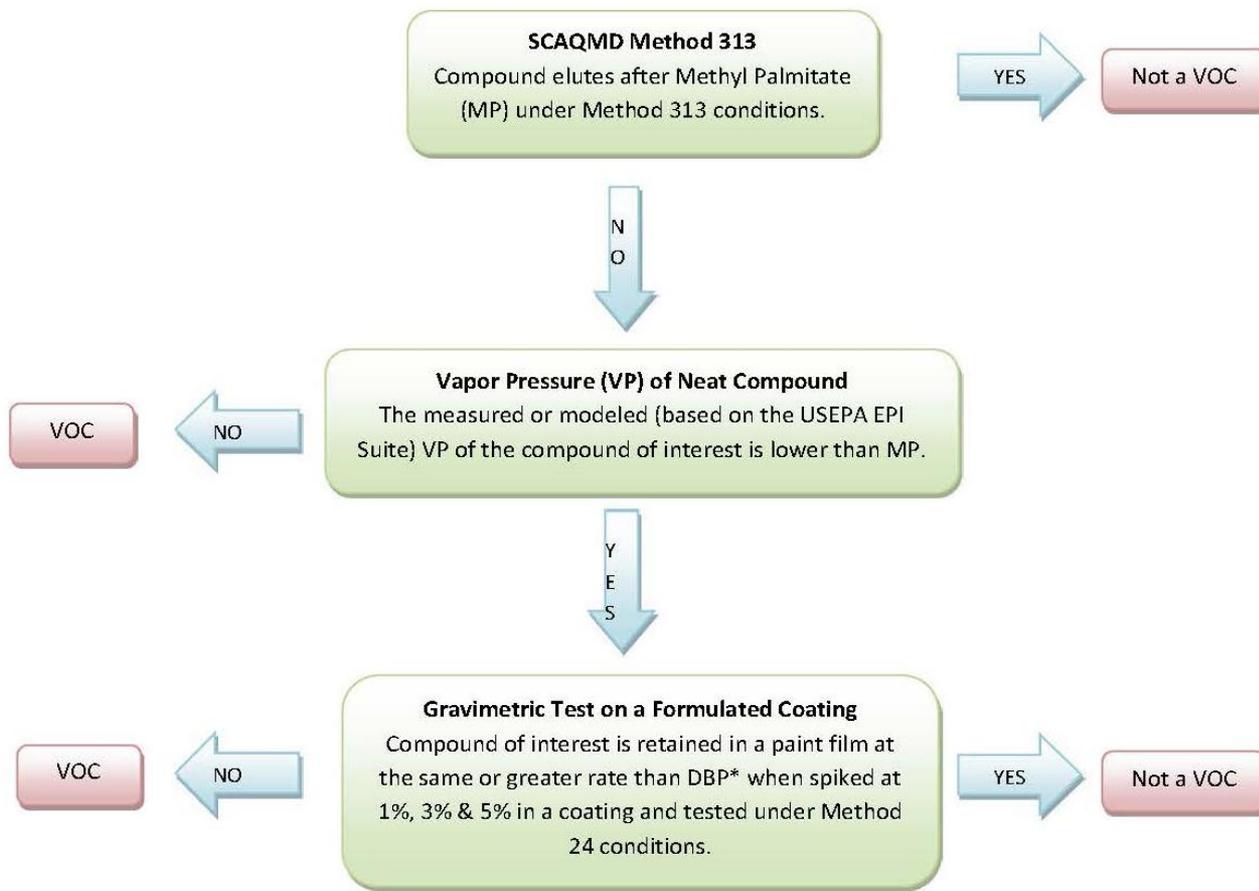
- Working with the EPA on precision and bias study – EPA Method 301 validation
- Considering small scale round robin (3 laboratories)
- Considering referencing ASTM D 6886 precision until EPA approves precision and bias for Method 313

▶ Scope Change

- ASTM E1868 is not an equivalent to Method 24
- SCAQMD is open to a TGA VOC test for certain architectural coatings in the future (upon EPA approval) – but it has to be equivalent to Method 24

Draft Exclusion Pathway for Unreactive Compounds

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* Dibutyl Phthalate (DBP) is being used as a surrogate for Methyl Palmitate (MP) as MP is not miscible with most coatings or resins. DBP is less volatile than MP and elutes after MP on in Method 313.

SCAQMD METHOD 313 (cont.)

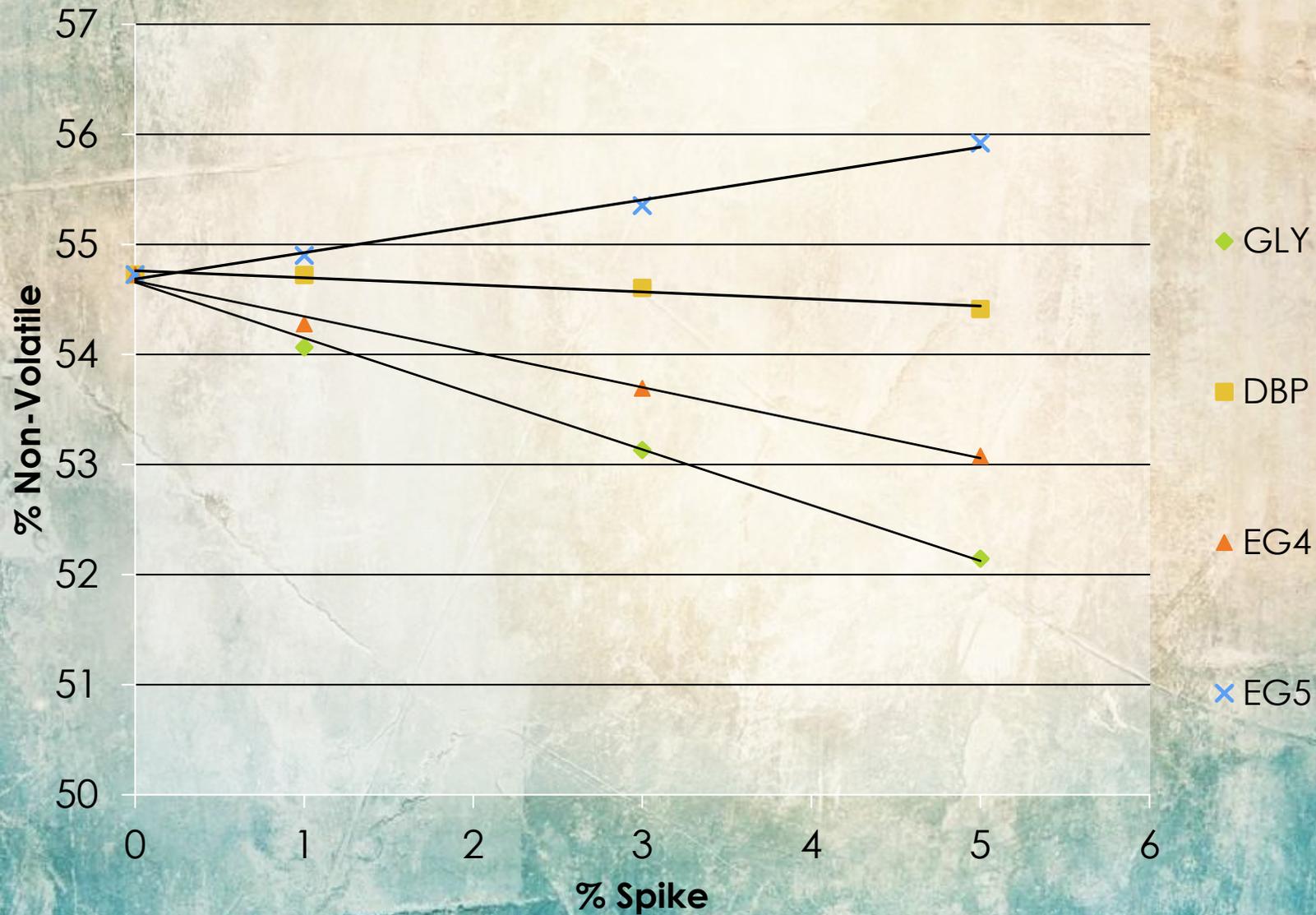
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▶ **Exclusion Pathway – SCAQMD Test Method 319**

- Draft Method 319 release
- Specify the method is for unreactive compounds only
- Step 2 – change to \leq Methyl Palmitate or use upper bound of error bar
- Suggested matrices to test (standard paints)
- How will Method 319 and excluded compounds be referenced?
- Compounds that are already ‘excluded’
 - Non-methoxylated bio-based oils: canola, soy, olive, grapeseed, tung, safflower, etc
- Step 3 - reference compound for (dibutyl phthalate (DBP) versus tetraethylene glycol(EG4))

SCAQMD METHOD 319

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Next Steps

- ▶ Stationary Source Committee – 09/18/15
- ▶ Set Hearing – 10/02/15
- ▶ Public Hearing – 11/06/15

A hand holding a paintbrush with blue paint splashing out, forming a large, dynamic shape. The paint is bright blue and has a glossy, liquid appearance. The splash is wide and curved, with several smaller droplets and splatters around the main body. The background is plain white.

QUESTIONS